

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

RTIP ID# <i>(required)</i> ORA030612				
TCWG Consideration Date				
Project Description <i>(clearly describe project)</i> The project provides for the development of a Metrolink commuter rail station. The project site consists of roughly 4.75 acres located in the City of Placentia, east of the 57 Freeway, north of Orangethorpe Avenue at the northeast corner of Melrose Avenue and Crowther Avenue in Orange County. The purpose of the project is to provide a Metrolink commuter rail station that meets current and future transit demand and fosters train ridership growth in the region. The Westgate Metrolink Station project includes street, railroad track, and pedestrian improvements and other infrastructure improvements, as well as the development of new rail platforms and parking (City of Placentia, 2007). The proposed project would provide a total of approximately 700 parking spaces, including a parking structure that would provide up to 410 spaces (Stantec 2012).				
Type of Project <i>(use Table 1 on instruction sheet)</i> Bus, rail, or inter-modal facility/terminal/transfer point				
County Orange	Narrative Location/Route & Postmiles City of Placentia, east of the 57 Freeway, north of Orangethorpe Avenue at the northeast corner of Melrose Avenue and Crowther Avenue in Orange County. Caltrans Projects – EA# N/A			
Lead Agency: City of Placentia				
Contact Person Richard Galvin	Phone# (301)792-2690	Fax# (301)792-2696	Email Richard@gpaenv.com	
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 X PM10 X				
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>				
Categorical Exclusion (NEPA)	X EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
Scheduled Date of Federal Action:				
NEPA Delegation – Project Type <i>(check appropriate box)</i>				
N/A Exempt	N/A Section 6004 – Categorical Exemption	N/A Section 6005 – Non-Categorical Exemption		
Current Programming Dates <i>(as appropriate)</i>				
	PE/Environmental	ENG	ROW	CON
Start	2002	October 2009	July 2008	January 2013
End	2012	February 2011	June 2009	January 2015

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of the project is to provide a Metrolink commuter rail station that meets current and future transit demand and fosters train ridership growth in the region. The project is a key component of the transit-oriented district envisioned in the proposed Westgate Specific Plan (the subject of a separate EIR), but will operate independently of the Specific Plan and irrespective of any land uses that may be proposed and ultimately constructed if the Specific Plan is approved. The new station will alleviate overcrowding that currently exists at the Metrolink Fullerton Station (City of Placentia 2007). The implementation of this project will increase the use of transit along the existing Inland Empire–Orange County Metrolink line and is consistent with the approved Metrolink Expansion Plan (Caltrans, 2006).

The project provides for the development of a commuter rail station which will promote alternative forms of transportation and travel. This investment in an alternative form of transportation will help to support transit-oriented development by providing commuters with a variety of choices, and will ultimately help to reduce the total number of vehicle trips. The Westgate Metrolink Station project includes a third rail siding for commuter trains, pedestrian and other infrastructure improvements, as well as the development of new rail platforms and parking. The project would accommodate a projected 530 train boardings and alightings each weekday. The project objectives are summarized, as follows (City of Placentia, 2007):

- Reduce dependence on individual motor vehicles for local and regional commute trips, thereby reducing on-road traffic and associated congestion and air pollution;
- Contribute to the redevelopment of the Westgate area with a complementary range of transit-oriented district that includes transit, housing, shopping and public/civic/open space;
- Contribute to the elimination of blighting conditions that continue to adversely affect the Westgate area;
- Provide a financially feasible project in light of OCTA grant and other budgetary restrictions for the project.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The project site is located in an industrial district adjacent to a pair of arterial roadways and an active railroad right-of-way. Land uses surrounding the southern portion of the site are largely industrial, including food packing, manufacturing, and miscellaneous storage. Land uses around the northern portion of the site are largely commercial and residential in nature.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build and No Build LOS: Once complete and operational the project will have less than significant impacts on area roadways and intersections (Class III). During both weekday peak periods, the study area intersections are estimated to operate acceptably with and without the project (i.e. ICU to not exceed .90). Impacts associated with transportation and circulation in and around the project area are considered less than significant. No offsite mitigation is required for the proposed project (Stantec, 2012).

Project AADT: 1,180

% Truck and Truck AADT: Project-generated trips would be predominantly commute-related trips, which are anticipated to consist largely of light-duty gasoline powered automobiles. According to the project PSR, approximately 880 of the 1180 projected vehicles would be those of commuters arriving to ride the train. The remaining 300 vehicles would be vehicles or shuttles arriving for drop-off/pick up of passengers (Stantec, 2012). The proposed project is not anticipated to result in a substantial increase in the use of heavy-duty diesel-powered trucks, nor would the project result in an increase in rail traffic along the existing active rail corridor. In addition, increases in localized emissions associated with the idling of commuter trains at the proposed station would not cause or contribute to an exceedance of applicable federal or State ambient air quality standards or exceed applicable SCAQMD health-risk thresholds. Projected future traffic volumes along primarily affected roadways and predicted localized emissions and risks associated with increased commuter train idling at the proposed station are discussed later in this submittal.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build and No Build LOS: Based upon the traffic impact analysis conducted for this project, the project will not have significant traffic impacts at any of the study area intersections. No offsite mitigation is required for the proposed project (City of Placentia 2007).

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Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The proposed project is not an interchange or intersection.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The proposed project is not an interchange or intersection.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

Based upon the traffic impact analysis conducted for this project, the project will not have significant traffic impacts at any of the study area intersections, which are projected to operate at acceptable LOS for near-term and future cumulative conditions. No offsite mitigation is required for the proposed project. The proposed project would include site access signalization and onsite improvements sufficient to reduce onsite vehicle congestion to a less than significant level (Stantec, 2012).

Comments/Explanation/Details (attach additional sheets as necessary)

The EPA “Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas” states that a project of air quality concern is a project on a new highway or expressway with greater than 125,000 annual average daily traffic and 8% or more of such AADT is diesel truck traffic. These projects are typically new or expanded highway projects that have a significant number of diesel vehicles, projects that affect congested intersections by adding a significant number of diesel vehicles, and new or expanded bus and rail terminals that have a significant number of diesel vehicles congregating at a single location.

Roadway Traffic

The traffic study completed for this project identified existing and future cumulative average-daily traffic (ADT) volumes along area roadways. Future ADT volumes were provided for near-term (year 2017) and future (year 2035) conditions, with project implementation. Estimated future ADT for roadway segments located adjacent to the project site are summarized as follows (Stantec, 2012).

Average Daily Traffic Volumes on Primarily Affected Roadways			
Roadway Segment	Average Daily Traffic (ADT)		
	Existing	Year 2017 with Project	Year 2035 with Project
Crowther Avenue, East of Melrose Avenue	5,000	8,000	9,000
Crowther Avenue, West of Melrose Avenue	5,000	5,000	8,000
Melrose Avenue, South of Crowther Avenue	8,000	9,000	9,000
Melrose Avenue, North of Crowther Avenue	8,000	9,000	9,000

Metrolink Locomotive Idling

This project was previously reviewed by the TCWG on January 26, 2010. In response to TCWG comments, the project sponsor was requested to “...provide additional information on emissions from additional stops and starts by diesel commuter trains and an analysis of their impact, if any, on the residents living adjacent to the tracks” (TCWG, 2010). Accordingly, the following discussion has been included for TCWG review:

The proposed project would not result in a change in existing or projected future train volumes along the existing Metrolink rail corridor. However, increased emissions would occur associated with the idling of commuter trains at the station. As previously discussed, the proposed Metrolink station is served by the 91 line, which currently averages 9 commuter trains per day. By the year 2030, Metrolink estimates that the number of commuter trains serving this line would increase to approximately 32 trains per day.

Emissions associated with locomotive idling were quantified based on the above data and current locomotive emission factors obtained from the California Air Resources Board and the U.S. EPA. Calculated locomotive idling emissions for the proposed Westgate Metrolink Station, for both existing and year 2030 conditions, are summarized below, in comparison to SCAQMD-recommended Localized Significance Thresholds (LSTs). LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, taking into account the ambient pollutant concentrations in the project area.

Daily Locomotive Idling Emissions in Comparison to SCAQMD's Localized Significance Thresholds					
Scenario	Daily Trains	Emissions (lbs/day)			
		PM₁₀/PM_{2.5}*	NO_x	ROG	CO
Existing (Year 2012)	9	0.0001	0.0034	0.0004	0.0006
Future (Year 2030)	32	0.0002	0.0067	0.0005	0.0021
SCAQMD LSTs:		3/2	221	None	1311
Exceeds SCAQMD LST?:		No	No		No
<p>*To be conservative, emissions of PM_{2.5} are considered equivalent to PM₁₀. SCAQMD=South Coast Air Quality Management District PM₁₀=Particulate matter less than or equal to 10 microns in diameter PM_{2.5}= Particulate matter less than or equal to 2.5 microns in diameter CO=Carbon Monoxide ROG=Reactive Organic Gases NO_x=Oxides of Nitrogen</p>					

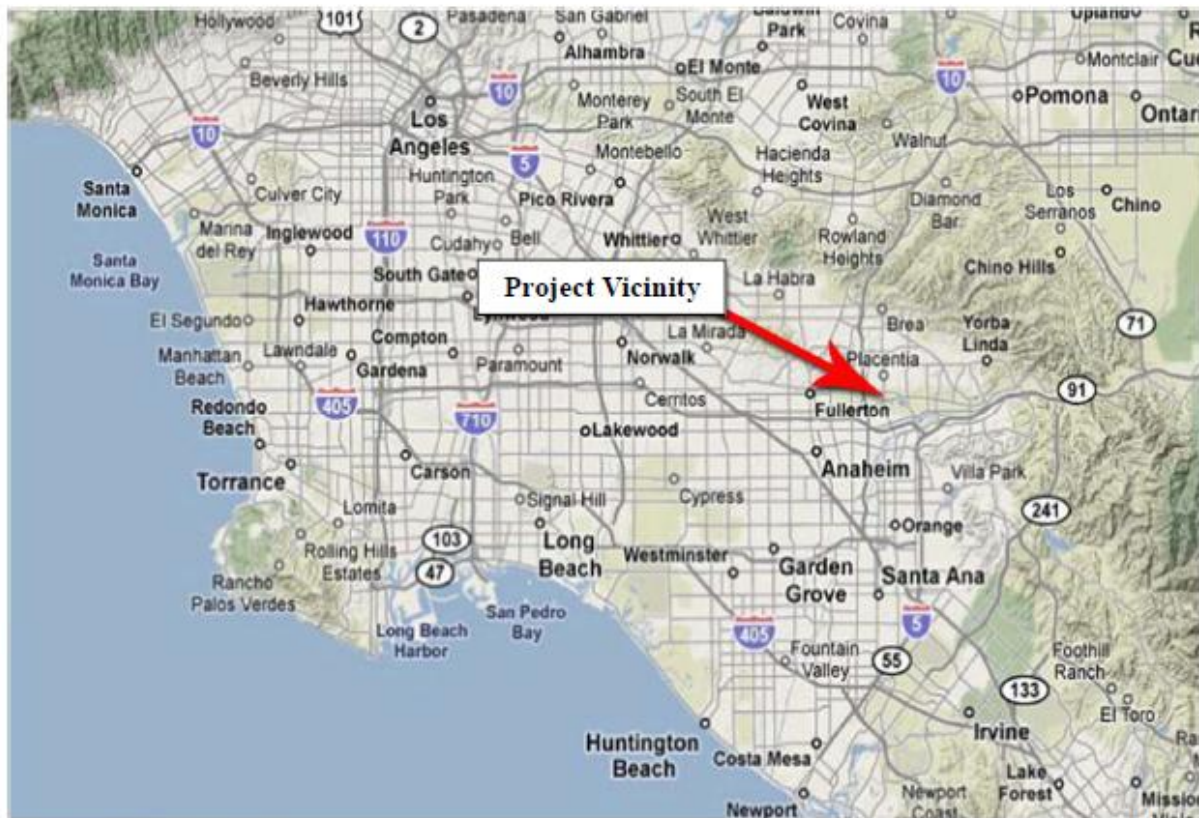
As indicated, locomotive idling emissions would not exceed SCAQMD's LSTs. As a result, project-related increases of locomotive emissions would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, taking into account the ambient pollutant concentrations in the project area. Based on emissions modeling conducted for this project, the idling of commuter trains at the proposed station would result in an incremental increase in cancer risks of 0.893 in one million, well below the SCAQMD's recommended significance threshold of 10 in one million and non-cancer health risks at the nearest receptor would be well below the hazard index threshold of 1.0 (Ambient Consulting, 2012).

For the reasons specified below, the proposed project is not expected to contribute to future violations of PM ambient air quality standards:

- The proposed project is not located along a highway or expressway with greater than 125,000 AADT. As noted above, traffic volumes along primarily affected roadway segments are significantly lower than 125,000 ADT.
- Project-generated trips would be predominantly commute-related trips, which are anticipated to consist largely of light-duty gasoline powered automobiles. As such, the proposed project is not anticipated to result in a significant increase in the use of heavy-duty diesel-powered trucks along area roadways, nor would the project serve land uses that generate diesel truck trips.
- The proposed project would not result in a change in train volumes along the existing active rail corridor.
- The proposed project would not result in increases of localized PM concentrations that would cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard or an incremental increase in cancer or non-cancer risk at the nearest receptor that would exceed applicable significance thresholds.
- The proposed station would be served by Orange County Transportation Authority (OCTA). OCTA's bus fleet is powered by cleaner-burning fuels, including a mix of buses powered by compressed natural gas and liquefied natural gas (OCTA 2011). As a result, implementation of the proposed project would not be anticipated to result in a significant number of diesel-fueled buses congregating at onsite locations.
- The proposed project would result in increased use of an alternative form of transportation, will help to support transit-oriented development by providing commuters with a variety of choices, and will ultimately help to reduce the total number of vehicle trips within the region. Reductions in vehicle trips would result in reduced mobile-source PM emissions within the region.
- The proposed project is included in the 2008 Regional Transportation Improvement Plan. The project is identified as Orange County Project ORA030612 and is described as "Construct New Metrolink Station and Rail Siding" (SCAG 2012). The proposed project is consistent with this description. The 2008 RTIP was adopted by SCAG in May 8, 2008, approved by FHWA/FTA on June 5, 2008. The regional air quality emissions of the RTIP were analyzed and found to conform to the SIP, and the analysis was approved by the FHWA and FTA. Therefore, the regional emissions of the proposed project conform to the 2008 RTIP. The project description identified in the 2008 RTP is also consistent with the project description currently identified in the draft *2012-2035 Regional Transportation Plan Sustainable Communities Strategy*, which is anticipated to be adopted in April of this year (SCAG 2008, 2011).


For the above discussed reasons, the proposed project meets the conformity hot-spot requirements in 40 CFR 93.123.

MAP 1: PROJECT VICINITY



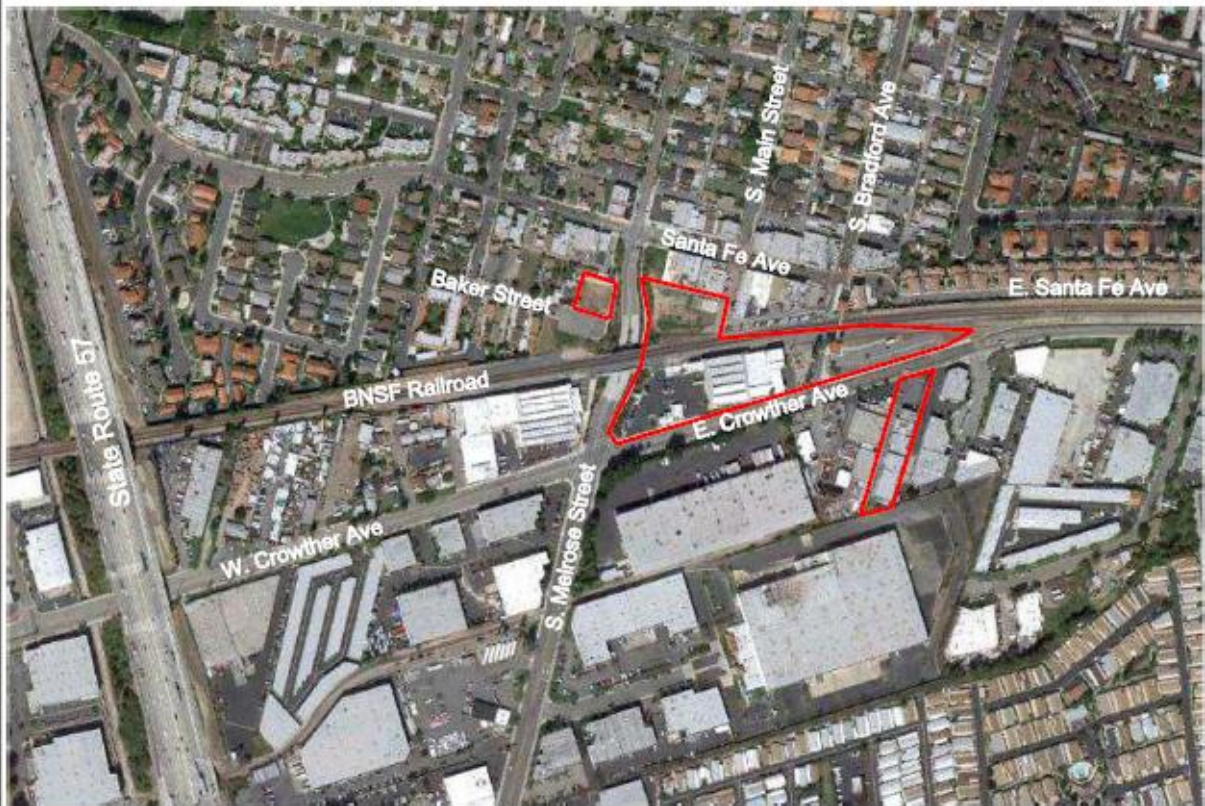
Southern California Terrain Map

(Courtesy of Google Maps)

Legend
 = Project Vicinity


<p>Galvin Preservation Associates</p> <p>G P A</p> <p>GPA Environmental 231 California Street El Segundo, CA 90245 (310) 792-2624 (310) 792-2696 (fax)</p>	<p>Project Location: Placentia, Orange County</p> 	<p>PROJECT NAME: Westgate Metrolink Station</p> <p>LOCATION: Intersection of Melrose Street and Crowther Avenue Placentia, CA 92870</p> <p>GPA PROJECT NO.: CFR090126ORA01CMCA</p> <p>MAP NOT TO SCALE</p> 
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MAP 2: PROJECT LOCATION



(Courtesy of Google Earth)

Legend

 = Project Location

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MAP NOT TO SCALE



MAP 3: PROPOSED PROJECT



(Courtesy of Google Earth)

Legend

- = Proposed Platforms
- = Proposed Surface Parking
- = Proposed Parking Structure
- = Proposed Water Well Relocation

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References

AMBIENT Air Quality & Noise Consulting. February 6, 2012. Westgate Metrolink Station Project. Locomotive Emissions Assessment.

California Department of Transportation (Caltrans). September 6-7, 2006. State Transportation Improvement Program (STIP) Amendment 06S-006.

City of Placentia. March 7, 2007. Westgate Metrolink Station Draft Environmental Impact Report. Sch. No. 2007011046.

Orange County Transportation Authority (OCTA). Website: Protecting Air Quality: Cleaner burning fuel buses and smoother freeways reduce Orange County's carbon footprint. Accessed: October 28, 2009. Url: http://www.octa.net/air_quality.aspx.

Orange County Transportation Authority (OCTA). 2008. 2008 Annual Report. Available for download at URL: <http://www.octa.net/octaannual08.aspx>.

Stantec. February 2012. Placentia Metrolink Station Project. Traffic Analysis.